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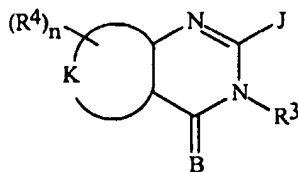
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(54) Title: QUINAZOLINONES AND PYRIDINOPYRIMIDINONES FOR CONTROLLING INVERTEBRATE PESTS



(I)

(57) Abstract: This invention provides methods for controlling inver-
tebrate pests comprising contacting the pests or their environment with
an arthropodically effective amount of a compound of Formula (I),
its N-oxides or agriculturally suitable salts wherein B, J, K, R³ and
R⁴ and n are as defined in the disclosure. This invention also pertains
to certain compounds of Formula (I) and compositions for controlling
invertebrate pests comprising a biologically effective amount of a com-
pound of Formula I and at least one additional component selected

from the group consisting of surfactants, solid diluents and liquid diluents.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D401/04 C07D239/91 C07D401/10 C07D403/04 C07D403/14
C07D471/04 A01N43/90 A01N43/54

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 14202 A (NOVARTIS ERFIND VERWALT GMBH ;NOVARTIS AG (CH); WALTER HARALD (CH)) 25 March 1999 (1999-03-25) cited in the application claims	1-32
A	claims	33,51,52
X	US 5 378 678 A (TICE COLIN M) 3 January 1995 (1995-01-03) claims	1-32
A	column 4; example 5; table 1 claims	33,51,52
X	US 6 114 340 A (BUSCHHAUS HERBERT ET AL) 5 September 2000 (2000-09-05) claims	1-32
	column 2, line 36,37 --- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

15 May 2002

Date of mailing of the international search report

28/06/2002

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 998 455 A (KUENG RUTH BEATRICE ET AL) 7 December 1999 (1999-12-07) claims column 2, line 46,47 ---	1-32
X	EP 0 579 424 A (ROHM & HAAS) 19 January 1994 (1994-01-19) claims page 14, line 23; example 225; table 1A	1-32
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X	DATABASE CHEMABS 'Online! CHEMICAL ABSTRACTS SERVICE,COLUMBUS OHIO; GUPTA,ANIL K. SEN ET AL: "SYNTHESIS AND PESTICIDAL ACTIVITY OF SOME QUINAZOLIN-4(3H)-ONE DERIVATIVES" XP002198895 abstract & PESTIC.SCI., vol. 26, no. 1, 1989, page 41-9 ---	1-32
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INTERNATIONAL SEARCH REPORT

International application No.
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claims 50/27 relate to an extremely large number of possible quinazolines which are not dependent on the quinazolinones of claims 1/33. Claims 27/50 therefore lack a meaningful generic expression. Accordingly a lack of clarity (and/or conciseness) within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of claims 27/50 impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear (and/or concise), namely compounds which are covered by the generic expressions of formula (I) and therefore (Ia) of claims 1 and 33.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

RU/US 01/46629

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